

1ST AND 2ND LETTERS		PROCESS AND PROPERTIES INDEX		3RD AND 4TH LETTERS	
B				27	
Comparative Characteristics of Catalysts Used in the Synthesis of Methanol. (In Russian.) D. A. Pusekhov. <i>Zhurnal Prikladnoi Khimii</i> (Journal of Applied Chemistry), v. 20, Nov. 1947, p. 1182-1184. Results of an experimental evaluation of 16 different catalytic compositions described in the literature, for above synthesis from CO and H₂, are tabulated. 26 ref. See also: No. 423 (petroleum-cracking catalysts) No. 553 (Pt-group catalysts—Germany) No. 586 (heat-exchanger flow) No. 737 (latex in paper making) No. 734 (pigment-strength determination)					
ASB-51A METALLURGICAL LITERATURE CLASSIFICATION					
FROM SYNTHESE		COLLECTION		FROM SOURCE	
1ST LETTER		2ND LETTER		3RD LETTER	
A	B	C	D	E	F
G	H	I	J	K	L
M	N	O	P	Q	R
S	T	U	V	W	X
Y	Z	AA	AB	AC	AD
AE	AF	AG	AH	AI	AJ
AK	AL	AM	AN	AO	AP
AQ	AR	AS	AT	AU	AV
AW	AX	AY	AZ	BA	BB
BC	BD	BE	BF	BG	BH
BI	BJ	BK	BL	BM	BN
BO	BP	BQ	BR	BS	BT
BU	BV	BW	BX	BY	BZ
CA	CB	CC	CD	CE	CF
CG	CH	CI	CJ	CK	CL
CM	CN	CO	CP	CQ	CR
CS	CT	CU	CV	CW	CX
CY	CZ	DA	DB	DC	DD
DE	DF	DG	DH	DI	DJ
DK	DL	DM	DN	DO	DP
DQ	DR	DS	DT	DU	DV
DW	DX	DY	DZ	EA	EB
EC	ED	EE	EF	EG	EH
EI	EJ	EK	EL	EM	EN
EO	EP	EQ	ER	ES	ET
EU	EV	EW	EX	EY	EZ
FA	FB	FC	FD	FE	FF
FG	FH	FI	FJ	FK	FL
FM	FN	FO	FP	FQ	FR
FS	FT	FU	FV	FW	FX
FY	FZ	GA	GB	GC	GD
GE	GF	GG	GH	GI	GJ
GK	GL	GM	GN	GO	GP
GQ	GR	GS	GT	GU	GV
GW	GX	GY	GZ	HA	HB
HC	HD	HE	HF	HG	HH
HI	HJ	HK	HL	HM	HN
HO	HP	HQ	HR	HS	HT
HU	HV	HW	HX	HY	HZ
IA	IB	IC	ID	IE	IF
IG	IH	II	IJ	IK	IL
IM	IN	IO	IP	IQ	IR
IS	IT	IU	IV	IW	IX
IY	IZ	JA	JB	JC	JD
JE	JF	JG	JH	JI	JJ
JK	JL	JM	JN	JO	JP
JQ	JR	JS	JT	JU	JV
JW	JX	JY	JZ	KA	KB
KC	KD	KE	KF	KG	KH
KI	KJ	KK	KL	KM	KN
KO	KP	KQ	KR	KS	KT
KU	KV	KW	KX	KY	KZ
LA	LB	LC	LD	LE	LF
LG	LH	LI	LJ	LK	LL
LM	LN	LO	LP	LQ	LR
LS	LT	LU	LV	LW	LX
LY	LZ	MA	MB	MC	MD
ME	MF	MG	MH	MI	MJ
MK	ML	MM	MN	MO	MP
MQ	MR	MS	MT	MU	MV
MW	MX	MY	MZ	NA	NB
NC	ND	NE	NF	NG	NH
NI	NJ	NK	NL	NO	NP
NQ	NR	NS	NT	NU	NV
NW	NX	NY	NZ	OA	OB
OC	OD	OE	OF	OG	OH
OI	OJ	OK	OL	OM	ON
OO	OP	OQ	OR	OS	OT
OU	OV	OW	OX	OY	OZ
PA	PB	PC	PD	PE	PF
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PM	PN	PO	PP	PQ	PR
PS	PT	PU	PV	PW	PX
PY	PZ	QA	QB	QC	QD
QE	QF	QG	QH	QI	QJ
QK	QL	QM	QN	QO	QP
QQ	QR	QS	QT	QU	QV
QW	QX	QY	QZ	RA	RB
RC	RD	RE	RF	RG	RH
RI	RJ	RK	RL	RO	RP
RQ	RR	RS	RT	RU	RV
RW	RX	RY	RZ	SA	SB
SC	SD	SE	SF	SG	SH
SI	SJ	SK	SL	SM	SN
SO	SP	SQ	SR	SS	ST
SU	SV	SW	SX	SY	SZ
TA	TB	TC	TD	TE	TF
TG	TH	TI	TJ	TK	TL
TM	TN	TO	TP	TQ	TR
TS	TT	TU	TV	TW	TX
TY	TZ	UA	UB	UC	UD
UE	UF	UG	UH	UI	UJ
UK	UL	UM	UN	UO	UP
UQ	UR	US	UT	UU	UV
UW	UX	UY	UZ	VA	VB
VC	VD	VE	VF	VG	VH
VI	VJ	VK	VL	VO	VP
VQ	VR	VS	VT	VU	VV
VW	VX	VY	VZ	WA	WB
WC	WD	WE	WF	WG	WH
WI	WJ	WK	WL	WO	WP
WQ	WR	WS	WT	WU	WV
WW	WX	WY	WZ	XA	XB
XC	XD	XE	XF	XG	XH
XI	XJ	XK	XL	XO	XP
XQ	XR	XS	XT	XU	XV
XW	XX	XY	XZ	YA	YB
YC	YD	YE	YF	YG	YH
YI	YJ	YK	YL	YO	YP
YQ	YR	YS	YT	YU	YV
YW	YX	YY	YZ	ZA	ZB
ZC	ZD	ZE	ZF	ZG	ZH
ZI	ZJ	ZK	ZL	ZO	ZP
ZQ	ZR	ZS	ZT	ZU	ZV
ZW	ZX	ZY	ZZ		

25

B

Stability of Metal Carbonyls. (In Russian.) D. A. Pospekhov. *Journal of Physical Chemistry (U.S.S.R.)*, v. 21, no. 1, 1947, p. 11-13.

Experimental data indicate that under high pressure a volatile copper carbonyl may be formed. Also indicates the possibility of the existence of the silver carbonyl.

ASAC 15A METALLURGICAL LITERATURE CLASSIFICATION
63000 820170
631137 GPC CNE 151

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESSES AND PROPERTIES INDEX																																																			
<i>Ca</i> 2 Electric conductivity and viscosity of nonaqueous solutions, D. A. Pospelov, <i>J. Phys. Chem. (U.S.S.R.)</i> 21, 139-40(1947) (in Russian).—Gorenbein's conclusions (C.A. 30, 2687*) are criticized. J. J. Bikerman																																																			
ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION																																																			
FROM SYMBOLS																										FROM SYMBOLS																									
SYMBOLS																										SYMBOLS																									

POSPEKHOV, D. A.

BA 8/49T33

USSR/Chemistry - Carbonyls, Reaction
Products of Metals
Chemistry - Metals, Reaction of
Carbon Monoxide on

Apr 48

"The Problem of the Mechanism of Forming Carbonyls
of Metals," D. A. Pospekhov, 1 3/4 pp

"Zhur Obshch Khim" Vol XVIII (LXXX), No 4

States hypothesis: when carbon monoxide reacts with
a metal, carbonyls are produced through inter-
mediate formation of polymer molecules of CO.
Submitted 1 Jun 1946.

8/49T33

CA 10

Schützenberger's ether-bromide. D. A. Pospelkhov, *Zhur. Obshchei Khim.* (J. Gen. Chem.) 18, 1031-3 (1948).
—The literature concerning the possible structure of the compd. obtained by Schützenberger [*Compt. rend.* 75, 1511 (1872); *Ann.* 167, 86 (1873)] on treatment of Et_2O with Br is reviewed (19 references). The substance is not homogeneous, but is a mixt. of $\text{EtO}(\text{Br})\text{C}_2\text{H}_5\text{Br}$ and $(\text{Et}_2\text{OH})^+\text{Br}_2^-$.
G. M. Kosolapoff

POSPEKHOV, D. A.

D. A. Pospekhov and N. N. Atamaneko, The action of aluminum on ethyl bromide. P. 1319.

At sufficient concentrations of $AlBr_3$ (from 0.05 mole of $AlBr_3$ per mole of C_2H_5Br) reaction begins at room temperature. The gaseous products of the reaction consist of ethane, ethylene and butane.

The Kiev Technological Institute of
Light Industry
December 9, 1946.

SO: Journal of General Chemistry (USSR) 18, (80) No. 7 (1948).

PA 67/49T41

POSPEKHOV, D. A.

USSR/Chemistry - Carbonyls
Metals

Dec 48

"Polymeric Carbonyls of Metals," D. A. Pospekhov,
Kiev Tech Inst of Light Ind, 3 3/4 pp

"Zhur Obshch Khim" Vol XVIII, No 12

Made a study of the formulas of various polymeric
metal carbonyls. Examined an expression, $n + \Delta = 1$,
where n is the polymerization coefficient and Δ
the difference between the atomic numbers of the
metal atom and the inert gas in the same period of
the periodic table.

67/49T41

POSPKHOV, D. A.

U S S R .

THE RELATION BETWEEN VISCOSITY AND ELECTRICAL
CONDUCTIVITY OF SALT SOLUTIONS. (K Voprosu O
Svizi Moshdu Viazkost' in i Elektroprovodnost' in V

Rastvorakh Solch. D. A. Pospekhov. Translated by
Gregory Belkov from Zhur. Fiz. Khim. 22, 59-68(1948).
15p. (TT-300; AEC-tr-1289)

The relation between viscosity, η , and molecular con-
ductivity, Λ , follows Johnston's equation ($\Lambda^0 \eta = \text{const.}$) above
a specific concentration in benzene, toluene, and nitro-
benzene solutions of AlBr_3 , SbBr_3 , toluene solutions of
 $\text{CuBrAl}_2\text{Br}_3$, and ethyl bromide solutions of AlBr_3 . The re-
lation is not valid for ethyl bromide solutions of SbBr_3 ,
 AlBr_3 . An inverse proportion between conductivity and
viscosity is observed in aqueous solutions of AgNO_3 and in
nitrobenzene solutions of SbBr_3 , AlBr_3 . (M.P.G.)

POSPENOV, D. A.

PA 49/49T30

USSR/Chemistry-Pyrophorous Materials

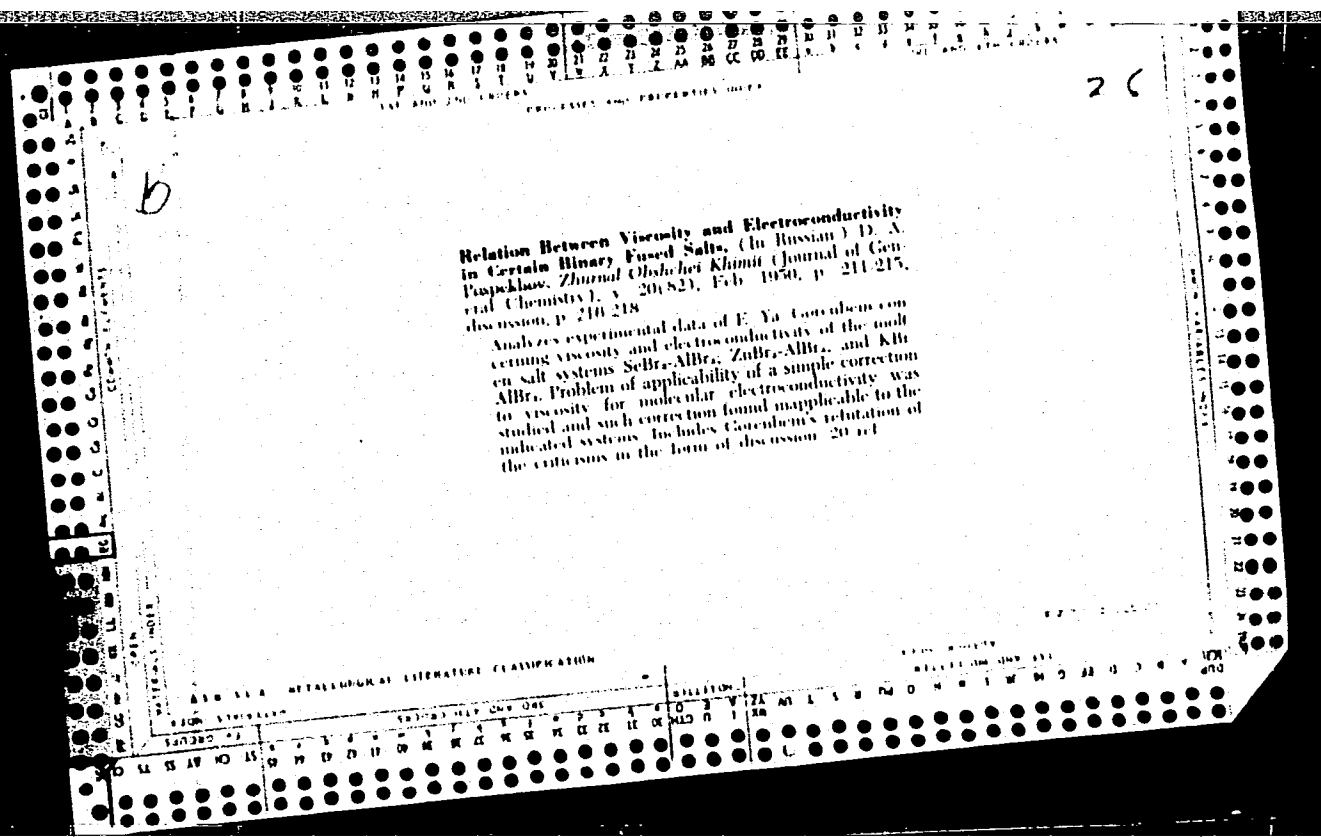
Jan 49

"Pyrophoric Metals," D. A. Pospekhov, 8 pp

"Zhur Priklad Khim" Vol XXII, No 1

Discusses most of the important works on pyrophoric metals (used to make flints, etc). High activity of pyrophoric metals is used only in obtaining certain carbonyls. Experimental possibilities made available by these metals have been overrated. Pyrophoric metals are not used to separate haloids from organic compounds; for synthesis of metallo-organic compounds, etc. Problem of the connection between pyrophoricity and catalytic properties requires further study. Submitted 9 Dec 47.

49/49T30



[illegible]

CA

Color of metal carbonyls and related compounds. D. A.
Pospelov (Kiev. Forest Ind. Inst.). J. Gen. Chem.
USSR, 20, 1707 (1949) (Engl. translation). -Ser.
C.I. 45, 215-6.
R. M. S.

2

CA

Temperature dependence of viscosity in homologous series. D. A. Pospelkov (Kiev Forestry Inst.). *Zhur. Priklad. Khim.* (J. Applied Chem.) 23, 170-5(1950).— Literature data confirm the linear relation between $\log \eta$ and $1/T$ over a very wide temp. range for many org. liquids. Within the same homologous series, for example, of normal structure, the straight lines of $\log \eta$ against $1/T$ converge with decreasing $1/T$ (increasing T) towards one common point of intersection, the position of which is characteristic of the given homologous series. The coordinates of that point are termed the limiting viscosity and the temp. of limiting viscosity. They are, for the alkane series, 0.00032 poise and 1078°; for 1-bromoalkanes, 0.00110 and 430°; for the alcohol-1 series, 0.00090 and 315°; for monoaromatics, 0.00072 and 490°; for normal fatty acids, 0.00138 and 342° (beginning with propionic acid) and 0.00100 and 406° (beginning with lauric acid). In most cases, the 1st members of a series deviate from the rest of the series. Branched compds. do not fit into the scheme. The "temp. of limiting viscosity" has, of course, no phys. meaning, but is an extrapolated point.

N. Thon

CA

Viscosity of metameric compounds. D. A. Pospelkov
(Kiev Forestry Inst.). *Zhur. Priklad. Khim.* (J. Applied
Chem.) 23, 285-7 (1950).—The straight lines representing
 $\log \eta$ as a function of $1/T$, for the ethers Et_2O , MeOPr ,
 Pr_2O , EtOPr , iso-BuOMe , iso-BuOEt , Bu_2O , $(\text{iso-Bu})_2\text{O}$,
and Am_2O , all converge at higher temps. and intersect at
one point, $\log \eta = 4.450$, $1000/T = 0.81$, with the only ex-
ception of $(\text{iso-Bu})_2\text{O}$ which shows a distinct deviation.
The effect of the structure of the radical is illustrated by
the example of EtMe_2COH , $\text{EtCH}(\text{Me})\text{CH}_2\text{OH}$, and
 $\text{Me}_2\text{CHCH}_2\text{CH}_2\text{OH}$, which do not intersect in one point.
The $1/\eta$ vs. $1/T$ lines of the esters HCO_2Me , AcOMe ,
 EtCO_2Me , PrCO_2Me , HCO_2Et , AcOEt , AcOPr , $\text{Me}_2\text{CH}-$
 CO_2Me , and EtCO_2Et intersect all in one point, $\log \eta =$
 4.695 , $1000/T = 1.10$. Metameric compds. do fit the
general relation established for homologous series (C.A.
44, 6220f). N. Thon "

POSPEKHOV, D.A.

PA 190T30

USSR/Chemistry - Halogens

Aug 51

"Viscosity of Halogens and Certain Halogen Compounds," D. A. Pospekhov

"Zhur Prik Khim" Vol XXIV, No 8, pp 876, 877

Plotted curves expressing dependence of lg of viscosity on reciprocal of abs temp for liquid I₂, Br₂, Cl₂, NH₃, AgI, AgBr, AgCl. Since no published data were found for viscosity of liquid F₂, the question of location of its curve for above dependence remains open, and no data on F₂ are given in this brief report.

190T30 ✓

POSPEKHOV, D. A.

"On the Researches of I. A. Kablukov, and D. P. Konovalov on the Electro-chemistry of Non-Aqueous Solutions." by D. A. Pospekhov (p. 48)

SC: Journal of General Chemistry (Zhurnal Obshchei Khimii), 1952, Volume 22,
no. 1

KABLUKOV, D. A.

Electrochemistry of nonaqueous solutions by I. A. Kablukov and D. P. Konovalov. D. A. Pospelkhov. *J. Gen. Chem. U.S.S.R.* 22, 53-7(1952)(Engl. translation). See *C.A.* 46, 6510e.
H. L. H.

CA

*General Physical
Chemistry - 2*

Dissociation of hexaphenylethane and related substances in solution. D. A. Pospelov (Kiev Forest. Inst.). *Zhur. Obshch. Khim. (J. Gen. Chem.)* 22, 974-5 (1952).—Data presented by Waters (*Chemistry of Free Radicals*, 1948, 2nd ed. (C.A. 42, 5422g)) on disocn. of Ph₃CCPh₃ in solns. are exact. Ziegler and Ewald (C.A. 24, 101) showed that the extent of disocn. in aliphatic solvents is greater, the lower is the dielec. const. of the solvent; the same is true of aromatic solvents except for AcPh. Similarly, tetraphenyl-dibenzoyltetrazane disocns. less in Me₂CO than in Et₂O or CHCl₃, despite higher dielec. const. of the former. Bis-(p-benzyloxy)hexaphenylethane disocns. more in C₆H₆ than in PhNO₂, but the p-methoxy analog shows opposite behavior (Gomberg and Buchler, C.A. 17, 557).
G. M. Kosolapoff

POSPENOV, D. A.

①
The relation of liquid densities to reduced temperatures.
D. A. Pospekhov. *J. Appl. Chem. U.S.S.R.* 25, 1809-14
(1952); *Zhur. Priklad. Khim.* 25, 930-42(1952); cf. *C.A.*
48, 3092b. The functional relation among the viscosities
of pure liquids grouped by homologous series is exponential.
The exponents for the same homologous series intersect at a
common point characteristic for each series when extrapolated
toward increasing temperatures. P. believes this
will lead to a reduced equation of state for each series.

Charles M. Mason

POSPEKHOV, D.A.

①
/ Viscosity of liquids as a function of temperature. D.A.
Pospekhov, *Zhur. Priklad. Khim.* 25, 1230-8 (1952);
cf. C.A. 48, 3092b.—Available data on the viscosity of
liquids are plotted against $1/T$ to refute the contention
that a break in the curve is an exception to some established
law, whereas it is a functional behavior assocd. with dif-
ferent homologous series (cf. C.A. 48, 7000e). I. B.

[Signature]
2/10/54

POSPEKHOV, D. A.

Chemical Abst.
Vol. 48 No. 6
Mar. 25, 1954
General and Physical Chemistry

①²
The dependence of viscosity of a liquid on a new reduced temperature. D. A. Pospelkov. *Zhur. Priklad. Khim.* 26, 644-8(1953). For many liquids the ratio of the viscosity at a given temp. T to the viscosity at the m.p. can be given in terms of a reduced temp. $(T - T_m)/(T_c - T_m)$ where T_m is the m.p. and T_c is the crit. temp. Members of homologous series give similar curves. Gerald Oster

11-5-54

POSPEKHOV, D.A.

Viscosity of alkanes in gasiform state. *Zhur.prikl.khim.* 26 no.10:1045-1050
0 '53. (MLA 6'10)

(Viscosity) (Alkanes)

POPEKHOV, D. A.

11

• Viscosity of some liquids. D. A. Pospelov. *Zhur. Priklad. Khim.* 27, 212-14 (1954); *cf. C.A.* 44, 7000c. — The viscosity-temp. relations of some liquids which do not obey the function $\eta = Ae^{B/T}$ is found to be expressed by the function $\eta = Ae^{B/T^2}$. Plots of η vs. $1/T^2$ are straight lines for phenol, dinitroglycol, H_2SO_4 , triethylcarbinol, and chlorosulfonic acid. The last 3 give 2 intersecting lines similar to those found with glasses of the $Na_2SiO_3 - PbSiO_3$ system (Pospelov, *C.A.* 36, 323). The intersection of 2 lines of each substance is considered analogous to the intersection of the extrapolated lines of a homologous series (*C.A.* 44, 6220f). I. Rencowitz

ПОСПЕКХОВ, Д. А.

Subject : USSR/Chemistry AID P - 923
Card 1/1 Pub. 152 - 14/22
Author : Pospelkhov, D. A.
Title : Electrodeposition of light metals from nonaqueous
solutions at ordinary temperatures.
Periodical : Zhur. prikl. khim., 27, no. 5, 552-557, 1954
Abstract : Review of the electrolysis of alkali metal halides is
given. 57 references (40 Russian: 1910-1951).
Institution : None
Submitted : O 10, 1952

Pospekhov, D.A.

Graetz's formula for the viscosity of liquids. D. A. Pospekhov. *Zhur. Priklad. Khim.* 27, 789-91(1954) ~~CL 34, 25-30(1888)~~.—Recent data indicate that l_2 and l_1 in Graetz's formula for the viscosity of liquids (*Wied. Ann.* 34, 25-30(1888)) do not correspond to the crit. temp. and the m.p. and therefore cannot have the theoretical significance ascribed to them by many authors. I. B.

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 17/19

Author : Pospekhov, D. A.

Title : Reply to the critical comment of V. P. Solomko and S. D. Ravikovich

Periodical : Zhur. prikl. khim. 28, 4, 445-447, 1955

Abstract : This is a reply to V. P. Solomko and S. D. Ravikovich's "Dependence of the viscosity of liquids on temperature" Zhur. prikl. khim. 27, 546, (1954). 49 references (31 Russian: 1928-1954).

Institution : None

Submitted : D 19, 1954

POSPEKHOV, D. A.

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 147 - 31/35

Authors : Pospekhov, D. A.

Title : Additivity of the viscosity logarithm in the case of binary liquid systems

Periodical : Zhur. fiz. khim. 30/1, 228-229, Jan 1956

Abstract : Offering a critique of the J. Kendall reports (Journ. Amer. Chem. Soc.) the author refers to the Arrhenius logarithmic viscosity formula and shows that the viscosity ratio of a second component to the viscosity of a first is not as mentioned in the Kendall report, but, entirely different. The statement by Kendall that the additivity of the viscosity logarithm can be found in systems consisting of substances with close chemical structure is being refuted by different arguments. Seven references: 4 USSR, 1 Germ. and 2 USA (1887-1952). Diagram.

Institution : The Odessa Agricultural Inst.

Submitted : May 4, 1955

POSPEKHOV, D. A.

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001342610015-8"

Classification of pure liquids. Zhur. fiz. khim. 30 no. 5-1186-1188 49
'56. (MIRA 9:9)

1. Sel'skookhozyaystvennyy institut, Odessa.
(Liquids)

POSPYKHOV, D.A.

Industrial synthesis of methyl alcohol. Gidroliz. i lesokhim. prom.
11 no.2:31-32 '58. (MIRA 11:3)

(Wood alcohol)

POSPEKHOV, I., pensioner (Moskva)

Excused or not excused from other work? The main thing is to be full of initiative. Izobr. i rats. no. 5:32-33 My '61.

(MIRA 14:5)

(Moscow—Steelworks—Technological innovations)

POSPEKHOV, I. M.

POSPEKHOV, I. M. -- "The Basic Characteristics of Understanding Literary Personages by Students of the Eighth and Tenth Classes of the Middle School." Acad Pedagogical Sciences RSFSR, Sci Res Inst of Study Methods, Moscow, 1956. (Dissertation for the Degree of Candidate in Pedagogical Sciences.)

KNIZHNAYA LETOPIS
No. 41, October 1956

ZHITKOV, D.G., kandidat tekhnicheskikh nauk; NEKRASOV, N.N., inzhener.
POSPEKHOV, I.T., inzhener.

Examination of worn steel-wire ropes. Vest.mash.27 no.7:25-30
Jl '47. (Wire rope) (MIRA 9:4)

I.T. Pospekhov

SUKHININ, V.I., kandidat tekhnicheskikh nauk

"Steel cables for hoisting and conveying machinery." D.G. Zhitkov,
I.T. Pospekhov, Reviewed by V.I. Sukhinin. Stal' 15 no. 8: 766-768
Ag '55. (MIRA 8:11)

1. Institut gornogo dela Akademii nauk USSR
(Cableways) (Wire rope) (Zhitkov, D.G.) (Pospekhov, I.T.)

POSPEKHOV, I. T.

Stal'nyye kanaty dlya pod'yemno-transportnykh mashin (Steel cables for hoisting and transport machines, by) D. G. Zhitkov i I. T. Pospekhov. Moskva, Metallurgizdat, 1953.

391 P. Illus., Diagr., Tables.

"Literatura": P. (388)391.

SO: N/5

733.96

.26

POSPEKHOV, I.T.

ZHITKOV, D.G., professor doktor tekhnicheskikh nauk; POSPEKHOV, I.T.,
inzhener.

[Steel cables for hoisting and transport machines] Stal'nye kanaty dlia
pod'emno-transportnykh mashin. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry
po cherno i tsvetnoi metallurgii, 1953. 391 p. (MLRA 7:6)
(Cables)

POSPEKHOVA, T.M., inzh.-ekonomist

Some results of the analysis of labor productivity in the
manufacture of plastic goods. Trudy LIEI no.25:58-64 '59.
(MIRA 12:11)

(Plastics industry--Labor productivity)

POSPEKHOVA, T.M., inzh.-ekonomist

Intensification of the pressing of goods made of thermosetting plastics and its effect on labor productivity.
Trudy LIEI no.25:65-73 '59. (MIRA 12:11)
(Plastics industry)

POSPERHOVA, T. M.

p. 3

PHASE I BOOK EXPLOITATION

SOV/3896

Leningrad. Inzhenerno-ekonomicheskiy institut

Khimiya i khimicheskiye proizvodstva (Chemistry and Production of Chemicals) [Leningrad] Izd-vo Leningradskogo univ., 1959. 177 p. (Series: Its: Trudy, vyp. 25) Errata slip inserted. 2,500 copies printed.

Ed. (Title page): N. A. Klyukvin and A. F. Savchenkov; Ed. (Inside book): Ye. V. Shchemelava; Tech. Ed.: Ye. G. Zhukova.

PURPOSE: This collection of articles is intended for chemical engineers and technicians in general, and particularly for refiners engaged in coal coking and gas production from oil shale.

COVERAGE: The collection contains papers on the development of the chemical industry in the Leningradskiy rayon, the advantages of the automation and mechanization of chemical plant operations, labor productivity in the tire and plastics industries, and measures to lower the production cost of rubber products and plastics. The process of molding thermosetting plastic materials and efforts to intensify this process by equipping molding presses with high-

Card 1/5

Chemistry and Production of Chemicals

80V/3896

frequency generators and solenoidal distributors are discussed. Results of the utilization of tailings and by-products in the production of gas from oil shale are given. Another article deals with economic aspects of combined production processes. Experiments made in the semislocking of oil-shale tar performed in a pilot plant with the aid of a flowing heat carrier are described with an explanation of the interaction of carbon dioxide and products of shale decomposition. The advantage of using a solid heat carrier in heat exchangers, heaters, regenerators of pyrolysis units is pointed out in one paper, and the selection of material for heat carriers is discussed. The experimental study of the synthesis of triple-bond hydrocarbons achieved by the elimination of ammonium compounds is also explained as is the polarization of X-rayed fluoroite crystals in photoconductivity. The editors thank Docent S. A. Volkov, Professor L. A. Melent'yev, and Docent K. N. Yakovleva. References accompany most of the articles.

TABLE OF CONTENTS:

Foreword

3

Savchenkov, A. F. Chemical Industry in the Leningradskiy Ekonomicheskii Rayon and the Problem of Its Development
Card 2/5

5

PCSPEKNOV, D. A. ,

On the polymeric carbonyls of metals. p. 2045.

The expression $n + \Delta = 1$ holds true for polymeric carbonyls of metals; n is the polymerization coefficient; Δ — the difference calculated for the monomer between the effective atomic numbers of the central carbonyl atom and the inert gas which ends the period in which the given metal is situated.

The Kiev Technological
Institute of Light Industry.
May 26, 1947

SO: Journal of General Chemistry (USSR) 28 (80) No. 12, (1948)

USSR/Soil Science. Soil Biology

J-2

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 43828

Author : Pospelov A.

Inst : Not Given

Title : The Liquid Side-Dressing of Corn, Potatoes and Cabbage

Orig Pub : Sovkhoz. poiz-vo, 1957, No 6, 68-71

Card : 1/1

POSPELOV, A.

Pospelov, A. "A Magnetic Anomaly in the Novo-Oskol'sk Region of the Central Black-Sea District." Trudy Nauchno-Issled. Instituta pri Voronezhskom Gosud. Universitete, Voronezh, No. 4, 1930. pp. 5-35.

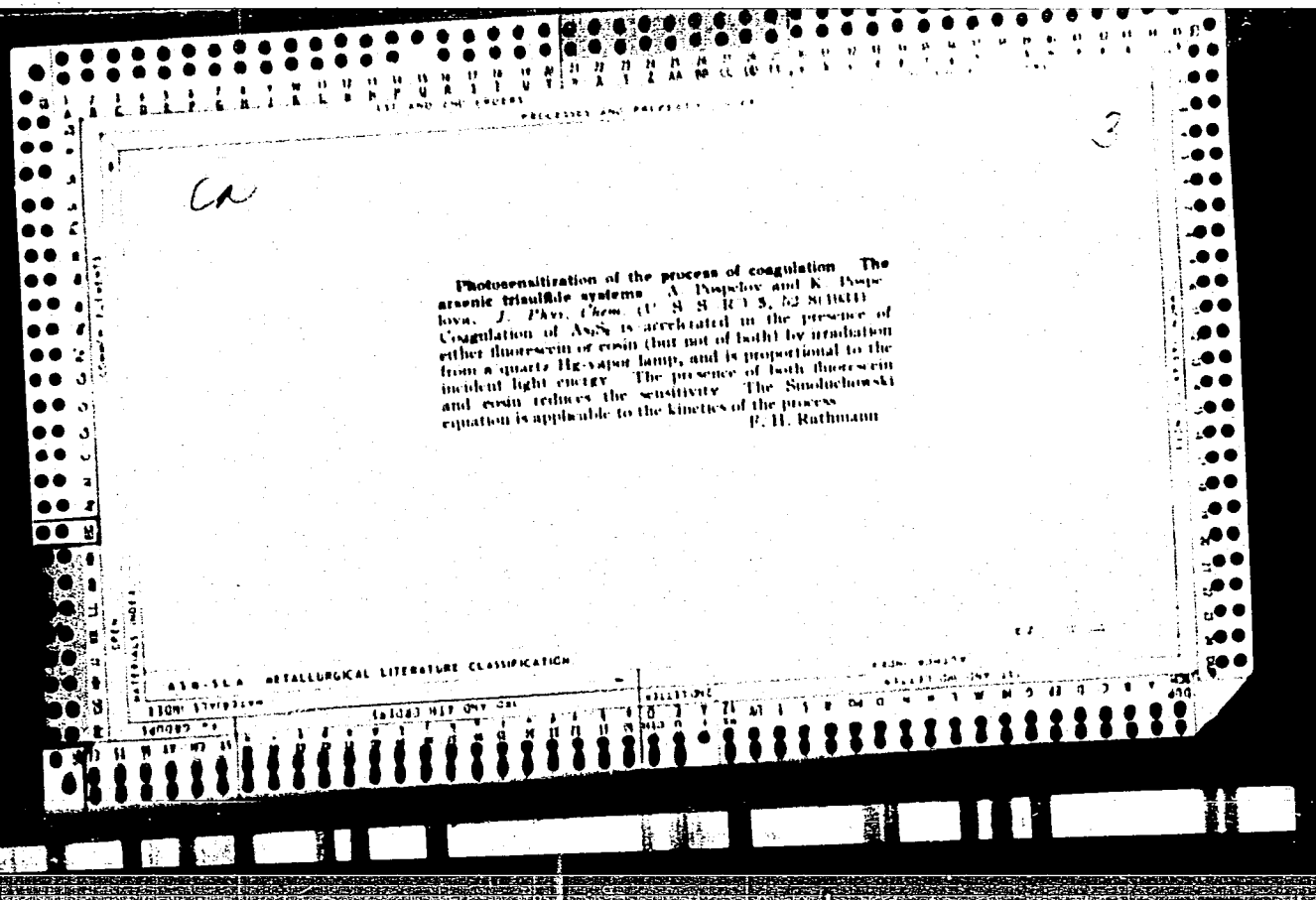
POSELOV, A.

Battelle Technical Review
July, 1954
Chemistry Physical

9348* The Nonequivalence of Lengths of the Metal-Oxygen Bonds in Certain Metal Oxides and the "Molecular" Structure of ZnO. (Russian.) G. S. Zhdanov and V. A. Pospelov. *Doklady Akademii Nauk SSSR*, v. 93, no. 1, Nov. 1, 1953, p. 97-99.
X-ray investigations of metal-oxide structures show noticeable differences in interatomic distances within the limits of the same coordination polyhedron. Graphs. 9 ref.

10-11-54

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POSOZHODY VET.

PHASE I BOOK EXPLOITATION SOV/5374

Academiya nauk SSSR. Gidrokhimicheskiy institut
Gidrokhimicheskiye materialy, t. XX (Hydrochemical substances, v. 30)
Moscow, Izd-vo AN SSSR, 1960. 213 p. Errata slip inserted.
2,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Gidrokhimicheskiy institut
(Novocherkassk).

Editorial Board (Title page): Resp. Ed. O. A. Alekin, M. V. V.
Veselovskiy, Deputy Resp. Ed. V. G. Datsko, G. S. Konvalov,
M. I. Kriventsov, P. A. Kryukov, Resp. Secretary and K. G. Lazarev. Ed. of Publishing House: D. M. Trifonov. Tech. Ed.: I. T. Borokhina.

PURPOSE: This publication is intended for hydrologists, hydrochemists and hydrometeorologists.

COVER: This is a collection of 22 articles on the hydrochemistry of rivers and water bodies in the USSR. The authors discuss pollution, spectrographic methods of determining the content of microelements in water, and the content and discharge of ions, gases, as well as chemical, biogenic, and organic substances. A map showing the distribution of the ionic discharge of rivers in the USSR is the most complete to appear in print to date. No personalities are mentioned. Each article is accompanied by references.

Veselovskiy, M. V., and I. A. Goncharova [Hydrochemical Institute AS USSR]. Regime of Dissolved Gas and Biogenic Substances as Sampled in One of the Forms of the Rostovskaya Oblast. 43

Rozinover, I. M. [Kafedra khimii Voronezhskogo Zoovetnitsituta - Department of Chemistry, Voronezh Zoological Veterinary Institute]. Data on the Hydrochemical Regime of Newly Flooded Reservoirs in the Voronezhskaya Oblast. 84

Datsko, V. G., and M. M. Guseinov [Hydrochemical Institute AS USSR]. On the Discharge of Biogenic Elements and Organic Matter by the Don River into the Sea of Azov After the Regulation of Its Flow 96

Benenov, A. D., and V. G. Datsko [Hydrochemical Institute AS USSR]. On the Oxygen Regime and the Content of Organic Matter and Biogenic Elements in the Waters of the Sea of Azov After Regulation of the Flow of the Don River 106

Datsko, V. G., and M. P. Maksimova [Hydrochemical Institute AS USSR]. On the Content of Dissolved Organic Matter in the Waters of the White Sea 115

Poskhoz, Ye. V. [Kafedra gidrogeologii Novocherkasskogo Politehnicheskogo Instituta-Department of Hydrogeology, Novocherkassk Polytechnic Institute]. On Chlorine Water: of Low Mineralization 122

Ianashin, P. V. [Kafedra obshchey i neorganicheskoy khimii Chernovitskogo gosudarstvennogo meditsinskogo instituta - Chernovitsky State Medical Institute]. Sulfate Waters of Northern Bukovina 126

Lavchenko, T. P. [Khimicheskaya laboratoriya Ukrainkov gidrogeologicheskoy ekspeditsii, Livov - Chemical Laboratory of the Ukrainian Hydrogeological Expedition, L'viv]. Mineral Waters of the Resort Truskavets 138

Getsen, V. V. [Daghestanskii filial AN SSSR, Geokhimicheskaya laboratoriya, Makhachkala - Geological Laboratory of the Daghestan Branch of the AS USSR at Makhachkala]. Gubden Hydrogen Sulfide Spring and the Hydrogen Sulfide Waters of Kl'dam (Daghestan) 150

Card 5/8

1ST AND 2ND CODES										PROCESSED AND PROPERTIES INDEX										3RD AND 4TH CODES									
										Measurement of the dielectric constant and the dipole moment of liquids in the range from $\epsilon = 2$ to $\epsilon = 88$. A. Pospelov and I. Zhilenkov. <i>J. Phys. Chem.</i> (U. S. S. R.) 5, 478-8 (1934).—An app. is described for measuring ϵ const. throughout the whole range with an accuracy of 0.2-0.35% and on vols. of liquid as small as 4 cc. The liquid of unknown ϵ is compared with one of known ϵ by a resonance method. Values of ϵ obtained were: CHCl₃ —5.4, Me₂CO —20.5, AmOH —14.1, EtOH —27.6.																			
A18-51A METALLURGICAL LITERATURE CLASSIFICATION										83001 804177																			
83001 810010										831001 804177																			

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3

Study of chemical reactions by means of a photoelement. A. BASHKIN AND N. KRASOVSKII. *J. Russ. Phys.-Chem. Soc., Phys. Pt.*, 61, 623 9(1929). The following chem. reactions were studied by means of a photoelement: (1) sepn. of S from the mixt. of $\text{Na}_2\text{S}_2\text{O}_3$ and H_2SO_4 ; (2) reduction of Ag in the mixt. of AgNO_3 and $\text{C}_6\text{H}_5\text{OKNa}$. Velocity consts. were computed by the equation for monomol. reaction and the curves plotted. Exptl. data were plotted as well, and curves obtained indicated a certain deviation from theoretical data. V. VASSILOVSKY

ASACSLA METALLURGICAL LITERATURE CLASSIFICATION

SHARYGIN, L.M.; POSPELOV, A.A.; CHUKHLANTSEV, V.G.

Preparation of granular zirconyl phosphate by freezing, and
its ion-exchange properties. Radiokhimiia 7 no.6:744-747 '65.
(MIRA 19:1)

I. 35843-66 ENT(m)/ENT(t)/ETI IJF(c) JD

ACC NR: AP6014/25 (N) SOURCE CODE: UR/0186/65/001/066/0144/0144

AUTHOR: Sharygin, L. M.; Pospelov, A. A.; Chukhlantsev, V. G.

49
B

ORG: none

TITLE: Obtaining granulated zirconium phosphate by freezing, and its
ion exchange properties

SOURCE: Radiokhimiya, v. 7, no. 6, 1965, 744-747

TOPIC TAGS: ion exchange, zirconium compound, cryogenic effect, PHOSPHATE,
GEL

ABSTRACT: Granulated vitreous materials have been obtained from silica
gel, zirconium and titanium dioxides, zirconium phosphate, and a number
of other compounds. The method for obtaining these inorganic ion
exchangers in a granulated form consists of the following operations:
1. Obtaining a gel from dilute solutions with subsequent washing out of
electrolytes in dialyzers, or with the use of ion exchange resins.
2. Slow freezing of the purified freshly precipitated gels in an air
cryostat at a heat removal rate of the order of 5-10 kcal/ml/hr.
3. Water classification of the granulated sorbent into fractions of the
same grain size, after thawing out. A further investigation was made of
the ion exchange properties of a number of samples of zirconium phosphate

L 35848-66

ACC NR: AP6014725

granulated by freezing. Experimental results are shown in a series of curves. Orig. art. has: 3 figures.

SUB CODE: 07, 20/ SUBM DATE: 02Mar65/ ORIG REF: 006/ OTH REF: 006

ns
Card 2/2

SUKHOV, Dmitriy Konstantinovich; POSPELOV, A.A., retsenzent; DMITRIYEVSKIY, M.V., retsenzent; INDZHIBELI, K.Kh., redaktor; KAN, P.M., redaktor izdatel'stva; SALAZKOV, H.P., tekhnicheskii redaktor

[Manual for inspectors of communication lines] Uchebnoe posobie
dlia linsinogo nadsmotrahchika svyazi. Moskva, Izd-vo "Rechnoi
transport," 1956. 231 p. (MLBA 10:2)
(Telephone lines) (Telegraph lines)

BUL'BA, T.G., inzhener (st.Gelta); POSPELOV, A.A., inzhener (st Gelta).

Transporting long welded rails. Zhel.der.transp. 37 no.4:86 Ap '56.
(Railroads--Rails--Transportation) (MLRA 9:7)

TARASOV, A.V.; POSPELOV, A.B.; NOVIKOV, G.I.

Pressure and vapor composition in the systems NaCl - CsCl and
KCl - CsCl. Vest.LGU 20 no.22:101-108 '65.

(MIRA 18:12)

POSPELOV, A.D., dots.

Applying the method of elastic solutions in calculating elastic-
plastic deformations of beams. Rasch.na prochn. no.2:233-251
'58. (MIRA 12:2)

(Girders)

POSPELOV, A. D., Docent.

"Application of the Method of Elastic Solutions to the Analysis of Elasto-plastic Deformations of Beams"

Calculations for Strength; Theoretical and Experimental Research on the Strength of Elements Used in Machine Construction. Collection of Articles, Vol. 2, Moscow, Mashgiz, 1958, 360pp.

VINKMAN, M.K.; GINTSINGER, A.B.; POSPELOV, A.G.; POLETAYEVA, O.K.;
YEGOROVA, L.I.; ROMANENKO, M.F.; FEDYANINA, Ye.S.; ASTASHKIN, V.A.;
CHERNYSHEVA, S.V.; ROMANENKO, Ye.V.; ASKARINA, N.A.; BOYARINOV, A.S.;
NADLER, Yu.S.; GORELOV, G.F.

Scheme of the stratigraphy of Lower Cambrian and the lower part of
Middle Cambrian sediments in the Altai-Sayan fold area. Trudy
SNIIGGIMS no.24:23-34 '62. (MIRA 16:10)

DZEVANSKIY, Yu.K.; DODIN, A.L.; KONIKOV, A.Z.; KRASNYY, L.I.;
 MAN'KOVSKIY, V.K.; MOSHKIN, V.N.; LYATSKIY, V.B.;
 NIKOL'SKAYA, I.P.; SALOP, L.I.; SALUN, S.A.; RAZIN,
 M.I.; RAVICH, M.G.; POSPELOV, A.G.; NIKOLAYEV, A.A.;
 IL'IN, A.V.; BUZIKOV, I.P.; MASLENNIKOV, V.A.; NEYELOV,
 A.N.; NIKITINA, L.P.; NIKOLAYEV, V.A. [deceased]; OBRUCHEV,
 S.V.; SAVEL'YEV, A.A.; SEDOVA, I.S.; SUDOVNIKOV, N.G.;
 KHIL'TOVA, V.Ya.; NAGIBINA, M.S.; SHEYNNMANN, Yu.M.;
 KUZNETSOV, V.A.; KUZNETSOV, YU.A.; BORUKAYEV, R.A.;
 LYAPICHEV, G.F.; NALIVKIN, D.V., glav. red.; VERESHCHAGIN,
 V.N., zam. glav. red.; MENNER, V.V., zam. glav. red.;
 OVECHKIN, N.K., zam. glav. red. [deceased]; SOKOLOV, B.S.,
 red.; SHANTSER, Ye.V., red.; MODZALEVSKAYA, Ye.A., red.;
 CHUGAYEVA, M.N., red.; GROSSGEYM, V.A., red.; KELLER, B.M.,
 red.; KIPARISOVA, L.D., red.; KOROBEKOV, M.A., red.;
 KRASNOV, I.I., red.; KRYMGOL'TS, T.Ya., red.; LIBROVICH,
 L.S., red.; LIKHAREV, B.K., red.; LUPPOV, N.P., red.;
 NIKIFOROVA, O.I., red.; POLKANOV, A.A., red. [deceased];
 RENGARTEN, V.P., red.; STEPANOV, D.L., red.;
 CHERNYSHEVA, N.Ye., red.; SHATSKIY, N.S., red. [deceased];
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 Pre-Cambrian] Stratigrafiia SSSR v chetyrnadtsati tomakh.
 Nizhni Dokembrii. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geologii i
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POSPELOV, A.G.

Systematic position of archaeocyathids. Mat.po geol.Zap.Sib. no.63:
11-13 '62. (MIRA 16:10)

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[Biology and conditions favoring parasitism in fungi of the
genus Botrytis] Biologiya i usloviya parazitizma gribov roda
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(MIRA 12:11)

(Fungi. Phytopathogenic)

~~POSPELOV, A.G.~~; ZAPROMETOV, N.G.; DOMASHEVA, A.A.; NIKITINA, Ye.V.; red.;
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[Fungi of the Kirghiz S.S.R.] Gribnaya flora Kirgizskoi SSR.
Frunze, Izd-vo AN Kirgizskoi SSR. No.1. [Systematic list of
species and geographical distribution] Sistematicheskoye-vidovoy
sostav i geograficheskoye rasprostraneniye. 1957. 128 p.
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POSPELOV, A.G.; FEDYANINA, Ye.S.

New data on the lower Paleozoic stratigraphy of Gornaya
Shoriya. Mat.po geol.Zap.Sib. no.61:86-89 '58. (MIRA 12:8)
(Gornaya Shoriya--Geology, Stratigraphic)

POSPELOV, A.G.; CHAGOROVA, R.M.; NIKITINA, Ye.V., redaktor; TSYBINA, Ye.V.,
tekhnicheskiiy redaktor

[Wood destroying house fungi and measures to control them;
a popular scientific brochure.] Derevorazrushaiushchie
domovye griby i mery bor'by s nimi; nauchno-populiarnaya
broshiura. Frunze, Izd-vo Akad. nauk Kirgizskoi SSR, 1957.
28 p.

(Wood-decaying fungi)

(MLRA 10:5)

POSPELOV, A.G.

leaf rusts of wheat in Frunze and Issyk Kul Provinces, their economic harmfulness, and measures for controlling them. Trudy Biol. inst.

KirFAN SSSR no.4:67-79 '51.

(MLRA 9:10)

(KIRGHIZISTAN--WHEAT--DISEASES AND PESTS)

(UREDINEAE)

POSPELOV, A.I.

Some problems of out-of-class work in geometry in secondary schools.
Uch.zap.Ped.inst.Gerts. 218:301-322 '61. (MIRA 14:10)
(Geometry--Study and teaching)

POSPELOV, A. I.

Category: USSR / Farm Animal Diseases Caused by Bacteria and Fungi.

V-2

Abs Jour: Ref Zhur-Biologiya, No 16, 1957, 72284

Author : Pospelov A. I.

Inst : Not given

Title : The Treatment of Mastitis in Cows by Intravenous Injection of Norsulfazole Simultaneously with Penicillin Administration.

Orig Pub: Noyocherkas. Zoovet, In-ta, 1956, Vyp. 9, 227-234

Abstract: For the treatment of acute serous, catharal and fibrous mastitis sodium norsulfazole was used in 40-50 mg/kg doses in the form of freshly prepared 10 percent solution, and injected intravenously. The medication was injected a second time in the same dose in 1-2 days. Simultaneously heat was applied to the udder with frequent squeezing and massage. This treatment appeared to be effective. Even better results were obtained by a double injection of penicillin (with a 6 hr interval), (100,000 units in 100-120 ml of distilled water) through the nipple with an intravenous injection of 10 percent solution of sodium norsulfazole on the following day.

Card : 1/1

-7-

POSPELOV, A.I., dotsent

Treating endometriosis in cows. Veterinariia 41 no.9:23-25 9 '64.
(MIRA 18:4)

1. Leningradskiy veterinarnyy institut.

1. POSELOV, A. I.
2. USSR (600)
4. Chemistry - Congresses
7. Joint scientific session of the Department of Chemical Sciences of the Academy of Sciences of the U.S.S.R. and the Academy of Sciences of the Uzbek S.S.R., Vest. AN SSSR 23, no. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

APPROVED FOR RELEASE: 07/13/2001, de CIA-RDP86-00513R001342610015-8"

Causes of the deterioration of the quality of sperm in bulls.
Veterinariia 41 no.10:61-63 0 '64.

(MIRA 18:11)

1. Leningradskiy veterinarnyy institut (for Bocharov, Pospelov).
2. Zaveduyushchaya stantsiyey iskusstvennogo osemeneniya sel'skokhozyaystvennykh zhivotnykh "Lesnoye" Leningradskoy oblasti (for Sokolova).

POSPELOV, Aleksandr Mikhaylovich, kand.tekhn.nauk; KRUGLYAKOV, M.L.,
kand.tekhn.nauk, retsenzent; FAL'KO, O.S., inzh., red.;
CHERNOVA, Z.I., tekhn.red.; GORDEYEVA, L.P., tekhn.red.

[Machinery for the application of liquid fertilizers] Mashiny
dlia vneseniia zhidkikh udobrenii. Moskva, Gos.nauchno-tekhn.
izd-vo mashinostroit.lit-ry, 1960. 143 p.

(MIRA 14:4)

(Fertilizer spreaders)

USSR/Cultivated Plants - Potatoes. Vegetables. Melons. etc.

M.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15621

Author : A.M. Pospelov

Inst : -

Title : The Liquid Dressing of Cabbages.
(Zhidskaya podkormka kapusty).

Orig Pub : Sad i ogorod, 1957, No 6, 27-30

Abstract : No abstract.

Card 1/1

POSPELOV, A.M.

[Mechanization in applying liquid fertilizer] Mekhanizatsiia
zhidkoi podkormki. Moskva, Moskovskii rabochii, 1956. 47 p.
(MLRA 10:4)

(Fertilizers and manures)

POSPHICV, A. M.

33263. Dozhdevaniye-Naiboleye Sovershenny Sposob Orosheniya. Gidrotekhnika
I Melioratsiya, 1949, No. 4, C. 25-38.

SO: Letopia ' Zhurnal 'n ykh Statey, Vol.45, Moskva,1949

POSPELOV, A.M.

36759

Novyye dozhdetal'nyye mashiny. [S primech. red.] Gidrotekhnika i melioratsiya, 1949, No. 5, c 25-35

SO: Letopis' Zhurnal'nykh Statey, Vol. 50, Moskva, 1949

POSPÉLOV, A. M.

Dozhdevanie [Sprinkling]. Moskva. Sel'khozgiz, 1953. 158 p.

SO: Monthly List of Russian Accessions, Vol. 6 No. 12 March 1954.

POGTELOV, A. M., Eng.

Soybean Oil

Processing soybeans at the Bobrov Oil Plant. Masl. -zhir. prom. 18, No. 3, 1953.

Monthly List of Russian Accessions, Library of Congress
June 1953. UNCL.

Pospelov, A. N.

Distr: 4E3d

3729

ANGLE-ENERGY DISTRIBUTION OF PHOTONEUTRONS

FROM BI ⁷⁹G. H. Zaitseva, L. E. Lazareva, and A. N.

Pospelov (Academy of Sciences, USSR). Soviet Phys.

JETP 5, 21-3(1957) Aug.

The angle-energy distribution of photoneutrons emitted from bismuth bombarded by x rays with a maximum energy $E_{max} = 18.9$ Mev has been investigated using nuclear emulsions. The energy distribution obtained includes a large number of energetic neutrons which cannot be explained in terms of the statistical theory. (auth)

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Pospelov, A.N.

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 ✓ 5630. ANGULAR AND ENERGY DISTRIBUTION OF PHOTO-
 NEUTRONS FROM BI. G.N. Zaitseva, L.E. Lazareva and
 A.N. Pospelov.
 Zh. eksper. teor. Fiz., Vol. 32, No. 1, 27-30 (1957). In Russian.
 The angular and energy distribution of photon neutrons emitted
 from bismuth on irradiation with X-rays of peak energy $E_{max} = 18.9$
 MeV was investigated by the nuclear emulsion technique. A large
 number of energetic neutrons which cannot be explained within the
 framework of the statistical theory was detected.

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Pospelov, A.V.

ZATSEPINA, G.N.; LAZAREVA, L.Ye.; POSPELOV, A.N.

Angular and energy distribution of photoneutrons from Bi. Zhur. eksp.
i teor. fiz. 32 no.1:27-30 Ja '57. (MIRA 10:4)

1. Fizicheskiy institut im. P.N. Lebedeva Akademii nauk SSSR.
(Neutrons)

POSPELOV, A N

19
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1-100000
Angular and energy distribution of photoneutrons from
thorium-232. G. M. Zakharenko, L. P. Lazareva, and A. N.
Pospelov. Zhur. Ekspol. i Teoret. Fiz. 32, 27-30 (1957);
Soviet Phys. JETP 5, 21-3 (1957).—The energy and angular
distribution were detd. for photoneutrons emitted by Bi
which has been irradiated with x-rays with a max. energy of
18.9 m.e.v. The energy distribution was detd. at angles of
30, 90, 150, and 270°. The exptl. curves were compared to
theoretical curves calcd. on the basis of the statistical theory.
Agreement was found only for the energy range 1.5 ~ 4.0
m.e.v. The yields of photoneutrons with energies > 4.0
m.e.v. are significantly greater at 90 and 270° than at 30
and 150°.
J. Rovner Leach

POSPELOV, A. N.

"Angular and Energy Distribution of Photoneutrons From Bi," G. N. Zatsepina, L. E. Lazareva, and A. N. Pospelov, Physics Institute imeni P. N. Lebedev, Academy of Sciences USSR, Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, Vol 32, No 1, Jan 57, pp 27-30

This work describes measurements of the energy distribution of photoneutrons emitted from bismuth at various angles relative to an X-ray beam. The measurements were made on the FIAN-30 Mev synchrotron. Maximum X-ray energy was 18.9 Mev. A thick photographic emulsion was used to record the protons.

Tables and graphs of the results are given. The article notes that a large number of high-energy protons were observed which cannot be explained within the framework of statistical theory. (U)

84M-1391

AUTHOR:

TITLE:

PERIODICAL:

ABSTRACT:

ZACEPINA, G.N., LAZAREVA, L.E., POSPELOV, A.N.
The Angle- and Energy Distribution of the Photoneutrons
emerging from Bi. (Russian)
Zhurnal Eksperimental'noi i Teoret. Fiziki, 1957, Vol 32, Nr 1,
pp 27-30 (U.S.S.R.)
Received: 3 / 1957

PA - 2031

Reviewed: 3 / 1957

The treatise in question studies with the method of thick layer emulsions the distribution of the energy of the photoneutrons flying out of bismuth at different angles in relation to the direction of the X-ray bundle. Measurements were taken on the 30 MeV synchrotron of the Physical Institute of the Academy of Sciences with a maximum energy of the X-rays ($E_{\text{max}} = 18,9 \text{ MeV}$). A drawing demonstrates the arrangement of the experiment and of the photo plates during the irradiation. The dose of the X-rays was measured with a thin integral ionization chamber. The mean value of the background was 10 to 16° at the different angles. On the occasion of microscopic investigation only those recoil protons were registered which were scattered against the moving direction of the neutrons into small angles. The necessary corrections are shortly mentioned. The number of the protons recorded on the plates which were arranged at angles of 30, 90, 150 and 270° amounted to 2605 after deduction of the

Card 1/3

APPROVED FOR RELEASE: 07/13/2001

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The Angle- and Energy Distribution of the Photoneutrons emerging from Bi. (Russian)
background. A diagram illustrates the spectra of energy $I(\epsilon)$ of the photo neutrons obtained at the angles mentioned. The spectra of the neutrons obtained at 30° and 150° are equal within the limits of errors. For γ radiation SCHIFF'S spectrum was used. The modifications of the spectrum of the X-rays while passing the bismuth test and the non-elastic scattering of the neutrons in the test have not been considered. Consideration of these corrections must increase the relative number of the neutrons with the highest energy. The two spectra calculated according to the statistical theory do not agree with the distributions of energy which were obtained for the photo neutrons emerging from bismuth. The experimental spectra of the neutrons agree with the calculated spectra only within a range of energy of from 1,5 to about 4 MeV. Beyond 4 MeV there is a considerable number of neutrons the yield of which must practically be equal to zero after the model of evaporation. At the angles of 90° and 270° the yield of neutrons with more than 4 MeV is considerably larger than at angles of 30° and 150°. The relative yields of neutrons of different energies are laid down in an index. The angle anisotropy increases considerably

Card 2/3

POSPELOV, A. N., ZATZEPINA, G. N. and LAZAREVA, L. E.

"Energy Spectrum and Angular Distribution of Photo Neutrons from Bi." a paper presented at the International Conference on Nuclear Reactions, Amsterdam, 2-7 July 1956.

D551274

POSPEROV, A. P. 3

ca

Observations on the chemiluminescence of amarine and lophine by means of a photoelement. A. P. POSPEROV, B. A. IVATNITSEV AND S. N. ZHURKOV. *J. Russ. Phys. Chem. Soc. Phys. Pt.* 61, 631-9 (1929).—The investigation consisted in the photoelectric study of a weak luminescence obtained in the oxidation of amarine ($C_{10}H_{15}N_3$) and lophine ($C_{10}H_{15}N_3$) by bromine water and bromine vapors. Intensity of the luminescence increased with the decrease in the amt. of original compd. and decreased with the increase in the quantity of oxidizing agent introduced. For amarine the fraction of the energy of the reaction transformed into light energy was 0.5×10^{-2} . V. V.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1ST AND 2ND COLUMNS

PROCESSES AND PROPERTIES INDEX

100 AND 1TH COLUMNS

3

ca

Photoelectric method for the study of reactions. A. P. PUSKALOV, J. Russ. Phys.-Chem. Soc., Phys. Pt. 60, 491 2(1928).--The method was applied to the systems: (1) Phenylacrylic acid and Br₂, (2) Eder's reaction: (a) in water soln. (b) in gelatin. V. VRSKLOVSKY

ASB-ILA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND COLUMNS

3RD AND 4TH COLUMNS

5TH AND 6TH COLUMNS

7TH AND 8TH COLUMNS

9TH AND 10TH COLUMNS

11TH AND 12TH COLUMNS

13TH AND 14TH COLUMNS

15TH AND 16TH COLUMNS

17TH AND 18TH COLUMNS

19TH AND 20TH COLUMNS

21TH AND 22TH COLUMNS

23TH AND 24TH COLUMNS

25TH AND 26TH COLUMNS

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41TH AND 42TH COLUMNS

43TH AND 44TH COLUMNS

45TH AND 46TH COLUMNS

47TH AND 48TH COLUMNS

49TH AND 50TH COLUMNS

51TH AND 52TH COLUMNS

53TH AND 54TH COLUMNS

55TH AND 56TH COLUMNS

57TH AND 58TH COLUMNS

59TH AND 60TH COLUMNS

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69TH AND 70TH COLUMNS

71TH AND 72TH COLUMNS

73TH AND 74TH COLUMNS

75TH AND 76TH COLUMNS

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81TH AND 82TH COLUMNS

83TH AND 84TH COLUMNS

85TH AND 86TH COLUMNS

87TH AND 88TH COLUMNS

89TH AND 90TH COLUMNS

91TH AND 92TH COLUMNS

93TH AND 94TH COLUMNS

95TH AND 96TH COLUMNS

97TH AND 98TH COLUMNS

99TH AND 100TH COLUMNS

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3

CO

The study of chemical reactions by means of a photo-element. A. P. POSPELOV AND V. F. KORRELSKII. *J. Russ. Phys.-Chem. Soc., Phys. Pt.* 60, 485 01(1928).--The photo-element method for the detn. of the velocity of photochem. reactions is based on the change in the limpidity of the reacting medium with the change in the concn. The pptn. of I₂ from KI in the presence of H₂SO₄ was studied, the velocity of the reaction being registered by a galvanometer. V. VASSILOVSKY

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

1ST AND 2ND ORDERS

2

ca

The process of coagulation of an arsenic trisulfide sol in a stream of atmospheric ions. A. P. Pospelov and V. N. Ivanov. *Bull. Inst. Colloides Voronizh* 1934, No. 1, 746; *Chem. Zentr.* 1936, II, 1867; cf. *C. A.* 28, 4315⁷. The coagulation of an As_2S_3 sol is accelerated by the action of a stream of atm. ions. As large a surface of the sol as possible should be exposed to the ionic stream and a considerable potential should be applied to the point emitting the ions. The ion concn. should also be high. M. G. Moore

ASD-51A METALLURGICAL LITERATURE CLASSIFICATION

POSPETOV, A.P.; SHOR, G.M.

Hydrogeology of the southern Aral Sea Region. Trudy
VSEGEI 109:349-366 '63. (MIRA 17:7)

15-57-1-798
Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1,
p 125 (USSR)

AUTHOR: Pospelov, B. A.

TITLE: A Lithologic and Facies Description of the Tula and Productive Series in the Lower Carboniferous on the Southern Limb of the Moscow Basin (Litologo-fatsial'naya kharakteristika tul'skoy i produktivnoy svit nizhnego karbona yuzhnogo kryla Podmoskovnoy kotloviny)

PERIODICAL: V sb: 9-ya nauch. tekhn. konferentsiya nauch. stud. o-va Mosk. nef. in-ta, 1954, Moscow, Gostoptekhizdat, 1955, pp 32-41.

ABSTRACT: The author gives a brief survey of the conditions of development of the Moscow basin and an outline of the stratigraphy of the Lower Carboniferous deposits according to M. S. Shvetsov. The Productive series is characterized by sands of varying thickness deposited on low areas on the basement; this series consists of

Card 1/4

15-57-1-798

A Lithologic and Facies Description of the Tula (Cont.)

one or several horizons of clay in the upper part of the section and layers of brown coal confined to the clays. The total thickness of the series ranges from several meters up to 60 m. The Productive series is divided into two facial zones. The first, consisting of continental clays and layers of sand, locally with brown iron ores, extends in a band parallel to the southern boundary of the basin. The continental nature of the sediments is indicated by the montmorillonite composition of the clays, the presence of cross-bedding in the sands, the general conditions of deposition. A transition from the first to the second zone is common and is expressed by a change from montmorillonitic to kaolinitic clay. Kaolinitic, allophanic, and halloysitic clays, enriched in Al_2O_3 , are found here. They form the so-called bauxite belt. The second zone, a continental coal-bearing series, consists of greasy, shaly clays, principally of the kaolinitic type, and layers of sand in which cross-bedding is marked. Beds of coal occur in the clays (up to three or four in the northern part of the zone, one at the southern border). A periodicity, associated with uplifts and depressions, is marked in this zone. Three cycles occur in the Productive

Card 2/4

15-57-1-798

A Lithologic and Facies Description of the Tula (Cont.)

sequence, locally more. The sequence for each cycle is sand, clay, coal, and sand again. A short-period transgression is locally marked by the presence of numerous marine fauna immediately adjacent to the principal coal bed. To the north, the sediments of the second zone grade into normal marine sediments and are barren of coal. This transitional zone may be considered the northern boundary of coal deposition. The structure of the Productive (sic) series is complicated by erosion active at various times. A number of facial zones are also recognized. The first zone of continental sands extends along the southern border in a wide belt. The second zone consists of littoral-marine sands and lenses of gray, locally coal-bearing clays. The sands are diagonally bedded. The third zone contains marine clays, predominantly montmorillonitic, and layers of siderite, brown iron ore, and thin, non-persistent layers of limestone. Inclusions of pyrite, rarely of phosphorite, occur in the clay. A fourth zone of marine clays and layers of limestone is distinguished farther to the north. Sands are again present among the clays in this area. The transition from the third to the

Card 3/4

111 AND 112 SERIES

PROCESSES AND PROPERTIES INDEX

2ND AND 4TH CRUSTY

2

POSPELOV, P. A.

Ca

Viscosity of glasses of the $\text{Na}_2\text{SiO}_3\text{-PbSiO}_3$ system in the region of softening temperatures. P. A. Pospelov and E. S. Evstrop'ev. *J. Phys. Chem.* (U. S. S. R.) 19: 125-28 (1941).—On the basis of expl. data it is shown that within the range of temps. from 400 to 1400° the viscosity of glasses is given by the Watterson equation $\ln \eta = a + (b/T)^n$, whereas the Tammann and the Fokker equations are applicable over narrower ranges (800-1200°) only. For practical glass-melting work the equation $\ln \eta = A + a/T^b$ holds for the viscosity ranges 10^{-10} and 10^{-14} poises. Up to 700° the viscosity as a function of compn. is given by $\ln \eta = a + bc$ where a and b are consts. and c is the mole % of either PbSiO_3 or Na_2SiO_3 . From 600 down to 450°, the curve of $\ln \eta = f(c)$ is given by two straight lines intersecting at the point corresponding to the compn. $\text{Na}_2\text{SiO}_3.2\text{PbSiO}_3$. Below 450° the equation is represented by a curve convex downward with a shorter and shorter straight central portion with decreasing temp.

P. H. Rathmann

COMMON ELEMENTS

COMMON VARIABLE INDEX

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POSPELOV B.A.

200

0. Viscosity of several glasses in the temperature interval between softening and annealing. I. B. A. Pospelov. Zhur. Fiz. Khim. 28, 2178-84 (1954); cf. ~~Abstracts~~ 1947. The viscosity (V) was detd. of 21 Na silicate glasses contg. varying amts. (up to 7.5%) of CaO , BaO , MgO , BeO , Al_2O_3 , and B_2O_3 , resp., and 3 Na borosilicate glasses at temps. from 410 to 600° in a described and illustrated app. in which a weight was suspended by a thread (l) of the glass being examd. in a const.-temp. furnace. V was derived from the photographically measured change of length of the l . Data are tabulated. I. W. Lowenberg, Jr.

measured l
PM l

USSR/Chemistry - Ceramics

Card 1/1 : Pub. 147 - 12/27

Authors : Pospelov, B. A.

Title : Viscosity of certain types of glass at softening and fritting points

Periodical : Zhur. fiz. khim. 28/12, 2178-2184, Dec 1954

Abstract : The methods usually employed in measuring the viscosity of glass at the softening and fritting points are briefly described. The relation between viscosity and temperature and composition was investigated for the following two types of glass : sodium bisilicate with oxide admixtures and boronatsilicate glass. The results obtained are tabulated. Four references ; 3 USA and 1 USSR (1903-1947). Tables; graph; drawings.

Institution :

Submitted : April 4, 1954

Pospelov, B. A.

✓ The nature of the film obtained by anodic oxidation of
magnesium and its alloys in chromate solutions. B. A.
Pospelov. J. Appl. Chem. U.S.S.R. 28, 711-12 (1955).
(Engl. translation). See C.A.B. 50, 2210f. B. M. R.

AID P - 3574

Subject : USSR/Chemistry
Card 1/1 Pub. 152 - 11/20
Author : Pospelov, B. A.
Title : ~~Characteristics of films obtained during the anodic~~
oxidation of magnesium and its alloys in chromic acid
solutions
Periodical : Zhur. prikl. khim., 28, 7, 748-750, 1955
Abstract : Brown films consisting of CrIII:CrVI = 4:1 are formed
on pure magnesium and on a Mg-Mn alloy (MAI). Black
films consisting of $MgCr_2O_4$ were formed on Mg-Al alloys.
Films formed under certain conditions can be removed
mechanically without affecting the metal. Two tables,
2 references, 1 Russian (1936).
Institution : None
Submitted : Ap 5, 1954

POSPOLOV, B. A.

USSR/ Chemistry - Physical chemistry

Card 1/1 Pub. 147 - 9/26

Authors : ~~Pospolov, B. A.~~

Title : Viscosity of certain types of glass in the interval between the softening and fritting points. Part 2. The viscosity of glass and its dependence upon temperature

Periodical : Zhur. fiz. khim. 29/1, 70-75, Jan 1955

Abstract : Empirical formulas are given for the calculation of the activation energy and viscosity of lead and sodium borosilicate glass systems containing admixtures of various oxides. Glass of the $\text{Na}_2\text{Si}_2\text{O}_5$ and PbSiO_3 systems was observed to have a maximum activation energy; minimum activation energy was demonstrated by the $\text{Na}_2\text{Si}_2\text{O}_5-2\text{PbSiO}_3$ composition. The effect of temperature on the viscosity of glass is explained. Ten references: 4 USSR; 3 USA; 2 French and 1 German (1846-1947). Tables; graphs

Institution :

Submitted : June 2, 1954

SOV/76-33-3-5/41

5(4)

AUTHOR:

Pospelov, B. A.

TITLE:

Viscosity of Two-component Lead Silicate-, Lead Borate- and Lead Phosphate Glasses in the Temperature Range of Softening and Fritting (Vyazkost' dvoynykh svintsovosilikatnykh, svintsovoboratnykh i svintsovofosfatnykh stekol v intervale temperatur razmyagcheniya i otzhiga)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 3, pp 543 - 546 (USSR)

ABSTRACT:

The viscosity of two-component-glasses is measured, in which one glass-forming oxide was exchanged for another, and in which lead oxide was used as metal oxide. The viscosity was determined from the expansion of the glass thread which was kept in the furnace at constant temperature. The apparatus used was already described (Ref 1). No difficulties arose in connection with the smelting of glass with 45% PbO and 55% SiO₂ at 1300°, whereas it was difficult to smelt glass containing 35% PbO and 65% SiO₂ at 1420°. Lead phosphorus glasses

Card 1/3

Viscosity of Two-component Lead Silicate-, Lead Borate- SOV/76-33-3-5/41
and Lead Phosphate Glasses in the Temperature Range of Softening and Fritting

were smelted at 600-700°C. The viscosity of the glass-forming acid boride was also measured. A diagram of the measuring results, expressed as a function of $\lg \eta - 1/T$ (Fig), shows that in the case of glass Nr 8 (45 PbO:55 P₂O₅) the range "softening - fritting" ("the length of the glass") is at 40° (viscosity = 10¹⁰ - 10¹³ poise) and in the case of glass Nr 9 (35 PbO : 65 P₂O₅) at 36°, i.e. "short" glasses are concerned. The glasses Nr 11 (45 PbO : 55 B₂O₃) and Nr 5 (35 PbO : 65 B₂O₃) are particularly "short". If B₂O₃ is partly replaced by PbO the glass becomes "shorter". Silicate lead glasses are "longer". Thus, it is possible to judge the state of glass up to a certain extent by the "length". Silicate glasses are more typical than phosphate glasses which are closer to such systems. The activation energies of the glasses investigated were calculated from the diagram $\lg \eta - 1/T$ (Table 3) in which connection several variations with respect to the activation energy were observed, which is due to the lattice strength of the glasses.

Card 2/3

Viscosity of Two-component Lead Silicate-, Lead Borate- SOV/76-33-3-5/41
and Lead Phosphate Glasses in the Temperature Range of Softening and Fritting

There are 1 figure, 3 tables, and 5 references, 3 of which
are Soviet.

SUBMITTED: September 29, 1956

Card 3/3.

5(4)

SOV/76-33-3-6/41

AUTHOR:

Pospelov, B. A.

TITLE:

Viscosity of Several Glasses in the Temperature Range Softening - Fritting (Vyazkost' nekotorykh stekol v intervale temperatur razmyagcheniya - otzhiga). III. The Dependence of the Viscosity of Glasses Upon Their Composition (III. Zavisimost' vyazkosti stekol ot ikh sostava)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 3, pp 547 - 549 (USSR)

ABSTRACT:

The diagram viscosity - composition of glasses has already several times been investigated (Refs 1-7). In a previous paper (Ref 8) the viscosity of the system Na_2O , PbO , SiO_2 was investigated in the temperature range softening - fritting, i.e. below the liquidus temperature of $\text{Na}_2\text{Si}_2\text{O}_5$ - PbSiO_3 .

The present paper deals with the investigation of the effect of admixtures of Na_2O , BaO , MgO , CaO , BeO , B_2O_3 and Al_2O_3 in amounts of 0.0357, 0.0714 and 0.1071 gram mole upon the viscosity of a glass of the composition SiO_2 - 67.3%,

Card 1/2

Viscosity of Several Glasses in the Temperature Range
Softening - Fritting

SOV/76-33-3-6/41

Na₂O- 32.7%. From the isothermal lines of viscosity for 420, 450, and 500°C (Fig) it can be seen that admixtures of BaO and Na₂O reduce the viscosity, whereas Al₂O₃, CaO, and BeO increase the viscosity. MgO-admixtures cause no variation. The decrease in viscosity is apparently due to the fact that excess SiO forms easily smelting sodium- and barium silicates which decrease viscosity, whereas Al-, Ca- and Be-silicates have a higher viscosity and therefore bring about an increase in viscosity. CaO- and B₂O₃ admixtures cause an interesting phenomenon i.e. at temperatures over the liquidus point they cause a decrease in viscosity and at temperatures below the liquidus point they bring about an increase in viscosity. There are 1 figure and 11 references, 8 of which are Soviet.

SUBMITTED: September 29, 1956

Card 2/2

POSPELOV, B.A. (Leningrad)

Anodic oxidation of magnesium in alkali solutions. Zhur.fiz.khim.
34 no.5:957-958 My '60. (MIRA 13:7)
(Magnesium) (Oxidation) (Sodium hydroxide)

BLAGIN, V.I.; POSPELOV, B.S.

Friction powder-metal parts used in automatic hydraulic transmissions of the GAZ automobiles. Avt.prom. 28 no.4:36-39 Ap '62. (MIRA 15:4)

1. Gor'kovskiy avtozavod.
(Automobiles--Transmission devices, Automatic)